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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
BLACKMAN, ANTHONY J	

ART UNIT	PAPER NUMBER
2676	21

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/679,391	BATES ET AL.	
	Examiner	Art Unit	
	ANTHONY J BLACKMAN	2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 April 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *31-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *31-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. On page 7 of 8 from applicant's OFFICE ACTION RESPONSE of paper number 20 lines 8-16 the explanation of RANGAN et al, US Patent Number 6,198,833 respectfully fails to specifically point out how the language of the claims patentably distinguishes them from the references. In fact, applicant even states,

"...the computation is done in a manner much less complex than that taught by RANGAN, et al. patent which requires a digital signature of all of the pixels within a wire frame used to encapsulate the selected object. Essentially, the digital signature in the RANGAN, et al. patent is comprised of a color characteristic value such as the RGB value of every pixel in the wire frame. In succeeding video frames, all of the pixels in the frame are compared with the digital signature to determine the location of the selected object. Such a process is extremely computation-intensive - much more computation than the system recited in the claims at issue".

First, examiner points out that applicant argues matter not claimed, regarding the "extremely computation-intensive" invention of RANGAN et al.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "extremely computation-intensive" invention of RANGAN et al) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Second, because the "open-ended" recited claim language of applicant (use of comprising rather than consisting of, for example) allows use of RANGAN et al.

Third, applicant argues subject matter not claimed, by asserting that RANGAN et al's invention is extremely computation extensive, in addition to withholding an explanation of the differences between RANGAN et al and the instant invention.

Therefore, Applicant's arguments filed 4/27/04 have been fully considered but they are not persuasive. Therefore, examiner maintains use of RANGAN et al anticipating claims 31-32 and RANGAN et al also anticipates claims 33-34.

Regarding claims 35-38, ISADORE-BARRECA et al, US Patent No. 6,205,231 Anticipating claims 35-38. Claims 33-38 are newly amended claims.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 31-36 are rejected under 35 U.S.C. 102(e) as being anticipated by RANGAN et al, US Patent No. 6,198,833.

4. As per claim 31, examiner interprets RANGAN et al to disclose in its entirety, " a method for automatically identifying an object in a plurality of video frames and associating the object with an event (column 4, lines 36-42 and 66-column 5, line 20) comprising:

determining *a* location in one of said video frames where an action by a pointing device has occurred defining a selected location (column 3, lines 29-64 – please note lines 29-34);

determining a color value of said selected location (column 3, lines 29-64- please note lines 35-44 - a continuation from column 3, lines 29-34); and automatically associating an event with said color value *of said selected location* in said one video frame and automatically associating events with said color value in succeeding video frames (column 4, lines 20-32)".

5. As per claim 32, examiner interprets RANGAN et al to disclose in its entirety, "A system for automatically identifying an object in a series of video frames and associating an event with said object (column 4, lines 36-42 and 66-column 5, line 20), the system comprising:

a system for determining a location in one video frame where an action by a pointing device has occurred defining a selected location (column 3, lines 29-64- please note lines 29-34);

a system for determining a color value associated with said selected location in said one video frame (column 3, lines 29-64 - please note lines 35-44 – a continuation from column 3, lines 29-34); and

a system for automatically associating an event with said object color value in succeeding video frames (column 4, lines 20-32)".

6. As per claim 33, examiner interprets RANGAN et al to disclose in its entirety, "A method for automatically identifying an object in a plurality of video frames and associating the object with an event (column 4, lines 36-42 and 66-column 5, line 20) comprising:

determining the coordinates of an object in a video frame that is selected by a

pointing device defining a selected object (column 3, lines 29-64- please note lines 29-34);

determining a color range for said selected object (column 3, lines 29-64 - please note lines 35-44 – a continuation from column 3, lines 29-34);

and automatically associating an event with said color range of said selected location in said one video frame and automatically associating events with said color value in succeeding video frames (column 4, lines 20-32)".

7. As per claim 34, examiner interprets RANGAN et al to disclose in its entirety "A system for automatically identifying an object in a series of video frames and associating an event with said object (column 4, lines 36-42 and 66- column 5, line 20), the system comprising:

a system for determining the coordinates of an object in one video frame that has been selected by a pointing device defining a selected object (column 3, lines 29-64 – please note lines 29-34);

a system for determining a color range for said selected object in said one video frame (column 3, lines 29-64 – please note lines 35-44); and

a system for automatically associating an event with said color range in said one video frame and succeeding video frames (column 4, lines 20-32)".

8. As per claim 35, examiner interprets RANGAN et al to disclose in its entirety, "A method for automatically identifying an object in a plurality of video

frames and associating the object with an event (column 4, lines 36-42 and 66-column 5, line 20) comprising:

determining the coordinates of an object selected in one of said video frames by a pointing device defining a selected object (column 3, lines 29-64 – please note lines 29-34);

determining a color pattern for said selected object (column 3,lines 1-column 4, line 42- please note that the color signatures are representative of the color pattern as claimed on column 3, lines 60-64 and column 4, lines 25-30); and automatically associating an event with said color pattern of said selected location in said one video frame and automatically associating events with said color pattern in succeeding video frames (column 4, lines 20-42 and 66-column 5, line 20).

9. As per claim 36, examiner interprets RANGAN et al to disclose in its entirety, "A system for automatically identifying an object in a series of video frames and associating an event with said object (column 4, lines 36-42 and 66-column 5, line 20), the system comprising:

a system for determining the coordinates of an object in one video frame selected a pointing device defining a selected object (column 3, lines 29-64 – please note lines 29-34);

a system for determining a color pattern for said selected object in said one video

frame (column 3,lines 1-column 4, line 42- please note that the color signatures are representative of the color pattern as claimed on column 3, lines 60-64 and column 4, lines 25-30);

and a system for automatically associating an event with said color pattern in said one video frame and succeeding video frames (column 4, lines 20-42 and 66-column 5, line 20)".

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over RANGAN et al, US Patent No. 6,198,833 in view of ISSADORE-BARRECA et al, US Patent No. 6,205,231.

12. As per Claim 37, examiner interprets RANGAN et al to disclose in its entirety, "A method for automatically identifying an object in a plurality of video frames and associating the object with an event (column 4, lines 36-42 and 66-column 5, line 20, 39-51 and column 11, lines 30-42) comprising:

even though RANGAN et al does not expressly teach use of an "edge means" in the remaining claimed features and limitations of claim 37, RANGAN et al does teach determining the coordinates of an object in one of said video frames selected by a pointing device defining a selected object (column 3, lines 29-64 – please note lines 29-34);

determining the color values of said selected object (column 3, lines 29-64 – please note lines 35-44);

and automatically associating an event with said color values in said one video frame and automatically associating events with said color values in succeeding video frames associated with the color values (column 4, lines 36-42, 66-column

5, line 20, column 6, lines 39-51, column 11, lines 3-14 and lines 30-42), *and even though*

RANGAN et al disclose a "Set-up that includes operations such as pre-selecting tracking element shape and size, pre-selecting number of target and test pixels, and so on (column 11, lines 3-5), RANGAN et al still does not expressly teach use of an "edge means".

Conversely, ISSADORE-*BARRECA et al suggest edge-processing means in association with color characteristics/luminosity characteristics (column 5, lines 35-62). It would have been obvious to one skilled in the art at the time of the invention to use the "...widely practiced edge detection technique known as SOBEL's Algorithm is used to detect an edge of an object 20. The edge is according to Gonzalez and Woods, a boundary between two regions of an image* (the two regions being the object 20 and the background 22 of figure 2...(column 5, lines 45-62) associated with "methods for identifying object[s] within the video image (column 5, lines 45-46) for"...easily identifying objects within a digitized moving video image (column 3, lines 19-22) of ISSADORE-BARRECA et al. ISSADORE-BARRECA et al modifies « a method for tracking a moving entity in a video presentation (column 2, lines 35-54)" of RANGAN et al because both inventions share similar technological environments corresponding to the processing of moving video images (ISSADORE-BARRECA et al) and tracking moving entities in a video presentation. Further, the addition of ISSADORE-BARRECA et al identifies and traces an object within a video image (abstract,

lines 1-2), in addition to providing hot spot capability for identified and traced objects (abstract, lines 1-4).

13. As per Claim 38, examiner interprets RANGAN et al to disclose in its entirety, "A system for automatically identifying an object in a series of video frames and associating an event with said object (column 4, lines 36-42, 66-column 5, line 20, 39-51 and column 11, lines 30-42), the system comprising: *even though RANGAN et al does not expressly teach use of an "edge means" in the remaining claimed features and limitations of claim 37, RANGAN et al does teach* a system for determining the coordinates of an object in one video frame selected by a pointing device defining a selected object (column 2, line 66-column 3, line 54, 55-64, and 65-column 4, line 42);
a system for determining the color values of said selected object in said one video frame (column 3, lines 29-64 – please note lines 29-34); and a system for automatically associating an event with said color values in said one video frame and succeeding video frames (column 4, lines 36-42, 66-column 5, line 20, column 6, lines 39-51, column 11, lines 3-14 and lines 30-42)" *and even though RANGAN et al disclose a "Set-up that includes operations such as pre-selecting tracking element shape and size, pre-selecting number of target and test pixels, and so on (column 11, lines 3-5), RANGAN et al still does not expressly teach use of an "edge means".*
Conversely, *ISSADORE*-BARRECA et al suggest edge-processing means in association with color characteristics/luminosity characteristics (column 5, lines

35-62). It would have been obvious to one skilled in the art at the time of the invention to use the "...widely practiced edge detection technique known as SOBEL's Algorithm is used to detect an edge of an object 20. The edge is according to Gonzalez and Woods, a boundary between two regions of an image *(the two regions being the object 20 and the background 22 of figure 2...(column 5, lines 45-62) associated with "methods for identifying object[s] within the video image (column 5, lines 45-46) for"...easily identifying objects within a digitized moving video image (column 3, lines 19-22) of ISSADORE-BARRECA et al.*

ISSADORE-BARRECA et al modifies « a method for tracking a moving entity in a video presentation (column 2, lines 35-54)" of RANGAN et al because both inventions share similar technological environments corresponding to the processing of moving video images (ISSADORE-BARRECA et al) and tracking moving entities in a video presentation. Further, the addition of ISSADORE-BARRECA et al identifies and traces an object within a video image (abstract, lines 1-2), in addition to providing hot spot capability for identified and traced objects (abstract, lines 1-4).

It would have been obvious to one skilled in the art at the time of the invention to use the "...widely practiced edge detection technique known as SOBEL's Algorithm is used to detect an edge of an object 20. The edge is according to Gonzalez and Woods, a boundary between two regions of an image (the two regions being the object 20 and the background 22 of figure 2...(column 5, lines 45-62) associated with "methods for identifying object[s] within the video image (column 5, lines 45-46) for"...easily identifying objects within a digitized

moving video image (column 3, lines 19-22) of ISSADORE-BARRECA et al. ISSADORE-BARRECA et al modifies « a method for tracking a moving entity in a video presentation (column 2, lines 35-54)" of RANGAN et al because both inventions share similar technological environments corresponding to the processing of moving video images (ISSADORE-BARRECA et al) and tracking moving entities in a video presentation. Further, the addition of ISSADORE-BARRECA et al identifies and traces an object within a video image (abstract, lines 1-2), in addition to providing hot spot capability for identified and traced objects (abstract, lines 1-4).

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY J BLACKMAN whose telephone number is 703-305-0833. The examiner can normally be reached Monday-Friday on an eight-hour FLEX SCHEDULE.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW BELLA can be reached on 703-308-6829. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ANTHONY J BLACKMAN
Examiner
Art Unit 2676

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Kee M. Tung
Primary Examiner